



## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (CURRENTLY AMENDED) ~~Seed of cotton line~~ A seed of cotton cultivar designated 02X25R, wherein a representative sample of seed of said line having been ~~cultivar was~~ deposited under ATCC Accession No. PTA-\_\_\_\_\_ PTA-7134.
2. (ORIGINAL) A cotton plant, or a part thereof, produced by growing the seed of claim 1.
3. (CURRENTLY AMENDED) A tissue culture of ~~regenerable~~ cells produced from the plant of claim 2.
4. (CURRENTLY AMENDED) ~~Protoplasts~~ A protoplast produced from the tissue culture of claim 3.
5. (CURRENTLY AMENDED) The tissue culture of claim 3, wherein cells of the tissue culture are ~~from a tissue~~ from a plant part selected from the group consisting of meristematic cells, leaf, pollen, embryo, root, root tip, anther, pistil, flower, seed, boll and stem.
6. (CURRENTLY AMENDED) A cotton plant regenerated from the tissue culture of claim 3, ~~said plant having~~ wherein the regenerated plant has all the morphological and physiological characteristics ~~of line of cultivar~~ 02X25R, wherein a representative sample of seed of said line having been ~~cultivar was~~ deposited under ATCC Accession No. PTA-\_\_\_\_\_ PTA-7134.
7. (ORIGINAL) A method for producing an F1 hybrid cotton seed, comprising crossing the plant of claim 2 with a different cotton plant and harvesting the resultant F1 hybrid cotton seed.
- 8.-10. (CANCELED)
11. (CURRENTLY AMENDED) A method for producing a male sterile cotton plant comprising transforming the cotton plant of claim 2 with a nucleic acid molecule ~~that confers male sterility~~.

12. (ORIGINAL) A male sterile cotton plant produced by the method of claim 11.

13. (ORIGINAL) A method of producing an herbicide resistant cotton plant comprising transforming the cotton plant of claim 2 with a transgene that confers herbicide resistance.

14. (ORIGINAL) An herbicide resistant cotton plant produced by the method of claim 13.

15. (CURRENTLY AMENDED) The cotton plant of claim 14, wherein the transgene confers resistance to an herbicide selected from the group ~~consisting of~~ consisting of imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

16. (ORIGINAL) A method of producing an insect resistant cotton plant comprising transforming the cotton plant of claim 2 with a transgene that confers insect resistance.

17. (ORIGINAL) An insect resistant cotton plant produced by the method of claim 16.

18. (ORIGINAL) The cotton plant of claim 17, wherein the transgene encodes a *Bacillus thuringiensis* endotoxin.

19. (ORIGINAL) A method of producing a disease resistant cotton plant comprising transforming the cotton plant of claim 2 with a transgene that confers disease resistance.

20. (ORIGINAL) A disease resistant cotton plant produced by the method of claim 19.

21. (CURRENTLY AMENDED) A method of producing a cotton plant with modified fatty acid metabolism or modified carbohydrate metabolism comprising transforming the cotton plant of claim 2 with a transgene encoding a protein selected from the group consisting of ~~stearyl-ACP desaturase~~, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme or encoding an antisense of stearyl-ACP desaturase.

22. (ORIGINAL) A cotton plant produced by the method of claim 21.

23. (CURRENTLY AMENDED) A cotton plant, ~~or part or a part thereof,~~  
having all the physiological and morphological characteristics of ~~the line~~ cultivar  
02X25R, wherein a representative sample of seed of said line having been cultivar was  
deposited under ATCC Accession No. PTA-                     PTA-7134.

24. (CURRENTLY AMENDED) A method of introducing a desired trait into  
~~cotton line~~ cotton cultivar 02X25R comprising:

- (a) crossing 02X25R plants grown from 02X25R seed, wherein a  
representative sample of seed of which has been deposited was  
deposited under ATCC Accession No. PTA-                     PTA-7134, with  
plants of another ~~cotton line~~ cotton cultivar that comprise a desired trait to  
produce F1 progeny plants, wherein the desired trait is selected from the  
group consisting of male sterility, herbicide resistance, insect resistance  
and disease resistance;
- (b) selecting ~~F1 progeny~~ one or more progeny plants that have the desired  
trait to produce selected ~~F1 progeny~~ progeny plants;
- (c) crossing the selected progeny plants with the 02X25R plants to produce  
backcross progeny plants;
- (d) selecting for backcross progeny plants that have the desired trait and  
physiological and morphological characteristics of ~~cotton line~~ cotton  
cultivar 02X25R listed in Table 1 to produce selected backcross progeny  
plants; and
- (e) repeating steps (c) and (d) ~~one or~~ three or more times in succession to  
produce selected ~~second~~ fourth or higher backcross progeny plants that  
comprise the desired trait and all of the physiological and morphological  
characteristics of ~~cotton line~~ cotton cultivar 02X25R listed in Table 1 as  
~~determined at the 5% significance level when grown in the same~~  
environmental conditions.

25. (CURRENTLY AMENDED) A cotton plant produced by the method of claim 24, wherein the plant has the desired trait and all of the physiological and morphological characteristics of ~~cotton line~~ cotton cultivar 02X25R listed in Table 1 as ~~determined at the 5% significance level when grown in the same environmental conditions.~~

26. (CURRENTLY AMENDED) The cotton plant of ~~claim 25~~ claim 25, wherein the desired trait is herbicide resistance and the resistance is conferred to an herbicide selected from the group ~~consisting of:~~ consisting of imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

27. (CURRENTLY AMENDED) The cotton plant of ~~claim 25~~ claim 25, wherein the desired trait is insect resistance and the insect resistance is conferred by a transgene encoding a *Bacillus thuringiensis* endotoxin.

28. (CURRENTLY AMENDED) The cotton plant of ~~claim 25~~ claim 25, wherein the desired trait is male sterility and the trait is conferred by a cytoplasmic nucleic acid molecule ~~that confers male sterility.~~

29. (NEW) A protoplast produced from the plant of claim 2.